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Ballard Spahr Andrews & Ingersoll, LLP
SUITE 1000
999 PEACHTREE STREET
ATLANTA, GA 30309-3915

EXAMINER	
THOMAS, JASON M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/685,354	CHEN, MICHAEL	
	Examiner	Art Unit	
	Jason Thomas	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-66 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-14, 16, 18-32, 34, 36-50, 52, 54-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh et al., U.S. Patent No. 6,493,038 B1 (hereinafter Singh), in view of Terasawa et al., U.S. Patent No. 6,147,714 A1 (hereinafter Terasawa).

Regarding claims 1, 19, 37, 55, 59 and 63: Singh discloses a method, apparatus and system for preparing at least a first image for integration with at least a second image, comprising: a receiver for receiving at least a first image (see [fig. 3, 11] for a receiver in the form of a tuner); at least a first encoder for forming a first compressed image (see [fig. 1, 13], [fig. 5, 65] for an encoder in the form of a PIP DSP where a PIP image is a compressed form of the original image) restricted to a first region of a first image area by representing at least one segment of the first image within the first region with a reference to another

segment of the first image within the first region, thereby preparing the first image for integration with the second image (see [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region); and a combiner for combining the first compressed image with the second image to form an integrated image (see [fig. 3] for a video blender which combines a first image (single frame of video) with a second image (single frame of video) to produce an integrated image for display on a display screen).

Singh does not teach using MPEG video for referencing frames.

Terasawa teaches MPEG videos (see [col. 3, ll. 35-49] for MPEG video).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to receive MPEG video from a broadcast transmissions, as taught in Terasawa, when receiving video to be combined to be output onto a display screen, as taught in Singh, because MPEG video is well known as a commonly broadcasted video format.

Regarding claim 2, 20 and 38: Singh discloses the method, apparatus and system further comprising: a receiver for receiving at least a second image (see [fig. 3, 11] for a tuner capable of receiving more that one image).

Singh however does not teach a second encoder for forming a second compressed image, thereby preparing the second image for integration with the first image.

Terasawa teaches a system for superimposing images that includes a second encoder for encoding received images (see [fig. 1, 302] for multiple encoders).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art provide at least a second encoder, as taught in Terasawa, when designing a system capable of providing PIP, as taught in Singh, because having multiple encoders reduces the demand on a single encoder dealing with multiple streams of images.

Regarding claim 3, 21 and 39: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second encoder forms the second compressed image restricted to a second region of a second image area by representing at least one segment of the second image within the second region with a reference to another segment of the second image within the second region (see Terasawa [fig. 1, 302] for multiple encoders; see also Singh [fig. 5, 65] for a PIP DSP encoder which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region).

Regarding claim 4, 22 and 40: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image area and the second image area are the same, and the first region and the second region are different regions within the same image area (see Singh [fig. 4] for an image area which is the same and the first and second regions are

different such that video 1 is in one region and video 3 in a second region of the screen).

Regarding claim 5, 23 and 41: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image area and the second image area are different, and the first region and the second region are different regions within different image areas (see Singh [fig. 1a] where the first and second image areas are different and where the first region and second region are within different image areas such that each different image area provides a user an option of changing the region of the PIP window).

Regarding claim 6, 24 and 42: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image is logically or physically divided into segments (see [abstract] where the received image can be a sequence of images also known as a video).

Regarding claim 7, 25 and 43: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second image is logically or physically divided into segments (see Singh [abstract], [fig. 3, 21] where the second received image can also be a sequence of images also known as a video).

Regarding claim 8, 26 and 44: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image includes at least one frame (see [abstract] where the received image can be a

sequence of images also known as a video, where a video has at least one frame which starts the image sequence).

Regarding claim 9, 27 and 45: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second image includes at least one frame (see [abstract], [fig. 3, 21] where the second received image can also be a sequence of images also known as a video, where a video has at least one frame which starts the image sequence).

Regarding claim 10, 28 and 46: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image area spans at least one frame, and the first encoder forms the first compressed image by representing at least one segment of the first image within the first region of the frame with a reference to another segment of the first image within the first region of the frame (see [abstract] where the received image can be a sequence of images also known as a video, where a video has at least one frame which starts the image sequence; see also [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region where the placement in a region is conducted for each frame of video displayed).

Regarding claim 11, 29 and 47: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second image area spans at least one frame, and the second encoder (see Terasawa [fig. 1, 302] for multiple encoders, which includes a second encoder) forms the

second Compressed image by representing at least one segment of the second image within the second region of the frame with a reference to another segment of the second image within the second region of the frame (see Singh [abstract] where the second received image can be a sequence of images also known as a video, where a video has at least one frame which starts the image sequence; see also [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region where the placement in a region is conducted for each frame of video displayed).

Regarding claim 12, 30 and 48: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image area spans multiple frames, and the first encoder forms the first compressed image by representing at least one segment of the first image within the first region of one frame with a reference to a segment of the first image within the first region of a different frame (see [abstract] where the second received image can be a sequence of images also known as a video, where a video has spans multiple frames which comprise the image sequence; see also [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region where the placement in a region is conducted for each frame of video displayed).

Regarding claim 13, 31 and 49: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second image area spans multiple frames, and the second encoder (see Terasawa [fig. 1, 302] for multiple encoders, which includes a second encoder) forms the second compressed image by representing at least one segment of the second image within the second region of one frame with a reference to a segment of the second image within the second region of a different frame (see Singh [abstract] where the second received image can be a sequence of images also known as a video, where a video has multiple frames which comprise the image sequence; see also [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region where the placement in a region is conducted for each frame of video displayed).

Regarding claim 14, 32 and 50: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the first image is a motion video image, and the second image is a still image, a motion video image, or a combination of both (see [fig. 4] where video source 1 occupies one region and video source 3 occupies another region).

Regarding claim 16, 34 and 52: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second image is a menu or programming guide (see [fig. 4] where video source 1, in the first region, is a video and the second region holds a programming guide image).

Regarding claim 18, 36 and 54: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system, wherein the first compressed image is combined with the second image to form an integrated image (see [fig. 3] for a video blender which integrates the images).

Regarding claim 56, 60 and 64: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system further comprising: at least a second encoder (see Terasawa [fig. 1, 302] for a second encoder) for receiving the second image and forming a second compressed image, wherein the combiner combines the first compressed image and the second compressed image (see Singh [fig. 3] for a video blender which combines a first and second image).

Regarding claim 57, 61 and 65: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the second encoder (see Terasawa [fig. 1, 302] for a second encoder) forms the second compressed image, restricted to a second region of a second image area, by representing at least one segment of the second image within the second region with a reference to another segment of the second image within the second region (see Singh [fig. 5, 65] for a PIP DSP which scales down an image from it's original size to a smaller size; see also [fig. 1a] for locating it within a first, second, third, etc. region).

Regarding claim 58, 62 and 66: The combined teachings of Singh, in view of Terasawa, teach the method, apparatus and system wherein the combiner selects first portions of the first compressed image within the first region, selects second portions of the second compressed image within the second region, and combines the selected first portions and second portions (see [fig. 3, 21] where video 1 and video 3 portions (frames) which can be selected individually for combination; see also [fig. 3, 14] for a video blender which is able to combing the frames that make up a video frame sequence).

3. Claims 15, 17, 33, 35, 51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh in view of Terasawa, and Feinberg et al., U.S. Pre- Grant Pub. No. 2002/0078440 A1 (hereinafter Feinberg).

Regarding claim 15, 33 and 51: The combined teachings of Singh, in view of Terasawa, do not teach the method, apparatus and system wherein the first image is a barker.

Feinberg teaches where a received video can be a video advertisement (see [31]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to insert a video advertisement, as taught in Feinberg, when inserting video in a region of the video display screen, as taught in Singh, because video advertisements are often used to recover revenue for the expenses involved in video broadcasting.

Regarding claim 17, 35 and 53: The combined teachings of Singh, in view of Terasawa and Feinberg teach the method, apparatus and system wherein the first image is prepared for integration with at least the second image for display to a content-on-demand subscriber (see Feinberg [7], [72] for a system designed to be capable of receiving and displaying demand-cast and on demand video).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423